

How much do the Students learn during Training to be Teachers in Schools? Experiences with ICT in Childhood Education

Rosalía Romero Tena

Professor of Education

Department of Didactics and Educational Organization

University of Seville

c/ Pirotecnia s/n. (4.06)

Seville 41013

Spain

Abstract

The learning and experience during the internship, is a topic of interest to improve the quality of the curriculum of initial teacher training. This paper provides an overview of what is done in children classrooms with ICT. A questionnaire was administered to students -N=230- of the specialty of Early Childhood Education of the University of Seville during 2011/12. The closed questions were analyzed to obtain the basic statistics and the open-ended questions were analyzed through a category system. This has allowed us to draw conclusions from the comments of participants. The findings show the lack of knowledge and experience gained by the students from ICT use and application in this practicum period, and also shows how little they know about strategies to ICT insertion in the children's classrooms. It is to be highlighted the great interest shown by students in acquiring knowledge of ICT, but there were very few schools within the practicum which worked with ICT.

Keywords: teacher training, ICT, pre-primary education, practical training, teachers' skills

1. Introduction

The Early Childhood Education covers the education process that begins with birth and ends with their entry into compulsory schooling (0-6 years). It is a critical period in basic skills and potential development, during which the individual's personality will be built. Infant education tries to develop those aspects of children that are linked to their evolutionary process, that is, tries to provide them with basic skills and tools that they acquire or start to develop in this period. Those are the basic structures of thought, affection, motor, communication, interpersonal relationships, creativity, etc...

The Education teacher training through Early Childhood Education has clear national and international benchmarks. In most of the 27 European Union countries there is a specific qualification for teachers of pre-primary education. In the period of study, there is a difference between European countries ranging from the two-year degree in Early Childhood Education in Malta and more than five years of Germany, where the students can even be provided with extended studies in certain areas. However, most European countries (64%) spend four years training teachers, although however, most European countries (64%) spend four years training teachers, although there are cases such as Austria, Belgium, Ireland and Luxembourg in which the duration of these studies is still three years. By contrast, countries like Germany, France, Italy or Lithuania are engaged in the same five or more years. Regarding both general and specialized curricular aspects, mismatched models could also be found but, anyhow, they are oriented to the same way of training and qualifications of Childhood and Primary Education teachers. In this sense, there are countries that supply a clearly generalist teacher training (Germany, Belgium, Denmark, France, Ireland, Malta, Portugal and the UK), others that combine this generalist approach with a specialization itinerary (Czech Republic, Cyprus, Slovenia, Finland and Italy), other countries choose postgraduate specialization (Austria, Greece, Latvia, Lithuania, Luxembourg, Netherlands and Hungary) and finally some countries choose guided curriculum to specialization, as in the case of Spain, together with to Estonia, Poland and Sweden. In many of the curricula of these countries significant weight it also given to the practicum credits, 30 to 60 credits is assigned.

Also regarding the practicum, the weight given by the European countries show a wide range of diversity. It is a period of stay in schools, supervised by tutors in all of the areas of knowledge involved in their studies and, prior to the stay in the centers, the student will receive a preparation related to the design of interventions in the classroom. Most models (44%) provide a range of six and twelve month's practicum in schools. Countries as Germany and Slovakia, give more than a year, while the rest of the countries give between one and six months. Our country, as well as the Czech Republic and Poland are in the range of two to three months.

2. Practical Training on Ict during the Practicum

During the practicum the student must *develop the technical skills* through by doing different functions and activities. Within this skill those related to ICT is the following, as is expressed in the Memoria Verificación Titulo Grado Infantil:

GT.2: "Designing teaching profession as a lifelong learning process adapting to scientific, pedagogical and social life over and committed to innovation, quality of teaching and the renewal of teaching practices, incorporating reflection processes in action and implementation experiences contextualized validity and programs well founded."
(p.29)

And also to develop *crossing skills*, based on professional activities related to the design and curriculum development at the kindergarten stage, teamwork, coordination, communication, etc ..., related skill to ICT is as follows:

GI.06: "*Capacity information management and use of advanced technological means*". (p.29)

But in a review of studies undertaken on practical ICT training for teaching staff, the correlation between adequate training for teachers and how effectively technology is incorporated becomes evident in a great deal of cases.

A summary of general points from the literature review tells us that these studies make clear, firstly, that equipping trainee teachers with technological skills is essential if this knowledge is to be passed on to future generations, adding a variety of suggestions about how this training can be given in an educational setting (Romeo, Lloyd & Downes, 2012). Secondly, there is a great deal of concern for the detection of the factors which, together with the setting, impede the use of technology (Yilmaz & Alici, 2011). Thirdly, it can be argued that there is a close relationship between the use of computers during the teaching practice and the targeted embracing of the ICT, being the study on how the perception of students influences the use of technology an interesting aspect to analyze.

The study presented in this paper can contribute to all this research by providing information on another factor which may affect the use of technology in the classroom i.e. the experience gained during teaching practice at school and how the incorporation of ICT into pre-primary classrooms learning can take advantage of it.

Some interesting findings have emerged from the data in studies undertaken in the Spanish context (Ortega et al, 1997, Romero, 2006, 2009). For instance, the fact that new teachers involved in nursery and primary levels show a persistent tendency to avoid the use of ICT, using traditional teaching material instead. They also highlight the fact that the tutors assigned to the students in the schools where they undertake their teaching practice are not adequate role models, and the students do not have the practical information to visualize the adequate implementation of this media within the classroom.

Studies carried out in other countries, such as the one by Franklin (2005), provide sufficient information to convince us that the training teachers undergo influences their later use of technology in teaching. Becker's study (2000) also shows us that the teachers who are most committed to working with computers are those with a constructivist teaching background, but this study does not make clear how this background has influenced their classroom practice or to what extent.

Niederhauser & Stoddart (2000) examine the relationship between the teacher's own views on education and the use of technology in teaching. The aim of this study was to examine the relationship between teachers' views on the use of computers effectiveness in teaching and the types of software they use. The results of this study show that teachers' views are related to the types of software they use with their pupils.

Spaulding (2007) also carried out statistical research in which he tested future and practicing teachers on their knowledge of computers and their own perception of their skills. The results of the Assessment of Technology Skills showed that trainee teachers scored higher marks in both their knowledge of the skills and their incorporation of these skills into the classroom. They also found that trainee teachers were more willing to incorporate technology. Spaulding's research (2007) showed that there is a direct correlation between the level of skills teachers consider themselves to have and their perception of their ability to incorporate technology effectively into the classroom. Although the perceptions of practicing teachers were much lower than trainee teachers, and more than half responded, to a previous questionnaire, that they routinely used a computer in their teaching, this conflicts with the data from the research. These teachers continue to express less positive feelings about incorporating computers than trainee teachers. Spaulding's study discovered that a technology training programme for teachers leads to more positive attitudes towards the use of technology in the classroom. However, it highlights the need for a follow-on study to determine the actual extent to which trainee teachers incorporate technology when they begin their teaching career.

Kumpalainen (2007) raised concerns about the ICT skills of both trainee teachers and teacher trainers, and the need to update their knowledge of technology. This study began by researching university level teacher trainers for (a) their perceived skills (b) their interests and (c) their attitudes towards the use of information and communication technology. The questionnaire was given to his education staff, including teachers and lecturers at the University of Oulu, Finland. The findings provide evidence that computer skills among the teacher trainers vary considerably according to their age and gender and, consequently, suggest a certain impact in the use of technology in education, the training of personnel or the activities of educators in general.

Finally, Karpatil (2008) points out that personality traits can be associated with the success or failure of becoming sufficiently proficient in ICT use in education. The strong correlation between certain personal characteristics in the success of ICT usage seems to suggest that the incorporation of digital teaching material and its methodology can be affected by individuals themselves, whether it involves teaching professionals and staff in the context of a specific teaching environment, course content, methods or tutors. His ICT courses are therefore designed to suit not only the starting levels of technological knowledge, but also the mentality of the teachers.

3. Study

Taken into account the above exposed background, the objective of the study focused on how the experience acquired by the students during practice training provides knowledge on ICT and how it can be integrated in child classroom.

An open-ended and a closed questionnaire (half-structured) were designed for the students where they could give their perceptions of the issues which were object of research. A structured questionnaire was drawn into five sections containing questions about the school (location, type and levels), children's teachers (gender and Degree), about the infant classroom (organization of space, timetable, and resources methodology), about the ICT classroom (which software they used) and ICT experience (description, computer corner, no experience assessment, ...). Examples (Figure 1) of one closed question and open-ended one are shown below:

5.- Experience(s) with ICT in the child classroom.

		Yes	No
5.1	Do you have any knowledge of ICT to bring to the classroom?		
5.2	Have you had any experience of ICT in the classroom?		
5.3	Have you had any experience of ICT outside the classroom?		
5.4	Have you taken part in any activities using ICT?		
5.5	Have you designed or developed any classroom activity using ICT?		

If your answer is yes in 5.2, 5.4 or 5.5, describes the experience you have observed, participated in, or has taken place:

Figure 1: Example of Close and Open-Ended Questions in the Questionnaire

A number of experts were sent to validate the first draft questionnaires, three professors from the School of Education who instruct ICT and three children's teachers that integrate ICT in their classrooms. They made a number of modifications that were incorporated to create the final version, which was the one given to the students. Examples of some of the recommendations used are detailed as follows:

- Organization of the questions:
 "5 –Experience(s) with ICT in the nursery classroom." I would organize this differently, in the way I suggest in the questionnaire in the attached file. Perhaps they will be in a better position to make a qualitative assessment after they have replied *yes* or *no*. If you leave it at the end, the student may end up losing sight of what is required from first question." (C.B)
- Clarification of the questions:
 "I would combine questions 4.3. and 4.4. as they refer to practically the same thing, and some of it would be left unanswered: 4.3. What do you do with them? How do you work with them? You could also define/differentiate between the roles of teacher and student wherever you use them." (M.V)

Overall, the average ratings of the questions (Table 1) in the different sections of the questionnaire were:

Table 1: Grading of the questionnaire by experts

		1	2	3	4	5	6
1.	The number of questions was...						X
2.	The themes included were...						X
3.	The semantics of the questions ...					X	
4.	The syntax of the questions...				X		
5.	The order they were in...						X
6.	The typology used in the questions...					X	

The final version was administered to students of the School of Education at the University of Seville studying early childhood education degree, during the 2011-12 scholar year and with a total sample of 230. 93% women and 7% men.

Relevant information about school centres and teachers related to the practice period were the following: that most of the schools where they spent their teaching practice were state schools (70%) in urban settings (76.1%), 90% of these schools provided pre-primary and primary education.

The teaching staff responsible for the practical training of the students (Practice Tutor) was 80% female (12% men, 7.4% unknown) and 78% were qualified pre-primary teachers (11.7%) university graduates, 2.2% other).

Before presenting the results, the categories' system used for the content analysis of the answers given by students was shown. The table 2 exposes the three main dimensions of the study and the most representative categories applied to the coding of responses.

Table 2: Category System Used for Content Analysis

Categories		Examples
The Infant classroom		
Space/time organization	Corner	“They are organised in corners: construction corner, letters corner, dressing up corner, hairdressing, kitchen and computer corners.”
	Work Table	“A number of corners for games, stories and other things. A large space with round tables.”
	Workshop	“When the whole class comes together, there are four tables: two larger ones which take more children, a blue table and a red table. Corners and workshops.”
Methodology	“The first hour is class time, then working in corners, good hygiene, breakfast, class time, working in corners and home time.”	
Resources	With ICT	"Textbook, complementary cards, CDs of children's songs, radio, psychomotor materials (rings balls, mats, etc.). All are used equally. "
	Without ICT	"The resources are present traditional books, cards, clay, stories, different games, videos. The least used resource was the slate ".
ICT in the Infant classroom		
Computer use	“There was a pattern where they sat down to use the computer L, M, X, J, and V. The teacher would choose the pupils and they would use the computer as a reward.”	
Software	“The computer corner is the space reserved for activities connected with learning about technology for nursery age children. In this corner, they use resources such as educational computer programs to give the children a start with computers.”	
Experience of ICT		
Participated	“I’ve seen ICT in the classroom but it was not used correctly. They mostly used it to watch films. They rarely used the computer for working.”	
No Participated	“I really haven’t seen an ICT or computer room in a nursery classroom, and if the school where I did my teaching practice knows anything about computers, it’s because once a week the teacher shows them images of things they haven’t seen, or because they use videoconferences.”	
Perceptions	“On the one hand I think this is a good thing, because I don’t agree with such young children using computers. However, on the other hand I think it’s a bad thing because in the world we live in, where computers are part of daily life, it’s a step backwards to prevent a child from using computers.”	

4. Finding

Following the most relevant results for each one of the sections are presented, starting with how space and time are organized in **Infant classrooms**, what type of methodology is used and which are the most often used resources.

From the responses received, which give us a clear picture of the general context in which preschool education is carried out, the vast majority of *classrooms work by corners* (83%). In some of them, this is the only methodology used, whereas in others they are combined with other strategies and methods of working. It appears, moreover, that this is closely linked to the distribution of the class and how the pupils are grouped. Finally, it should be noted that there is a wide variety of methodology, although most of it fits into what could be described as corners. Some examples are detailed below (Table 3):

Table 3: Example Categories "Corner" and Something Qualifications

Categories	Examples	Identific
Corners	<i>"The space is organised in corners (computer corner, art corner, library corner, maths corner, construction corner, symbols corner)"</i>	Q.1
	<i>"They are organised in corners: construction corner, letters corner, dressing up corner, hairdressing, kitchen and computer corners."</i>	Q.2
	<i>"In activity corners and in groups divided into five work tables." (Corner+tabl)</i>	Q.33
	<i>"When the whole class comes together, there are four tables: two larger ones which take more children, a blue table and a red table. Corners and workshops." (Corner+workshop)</i>	Q.78
	<i>"A number of corners for games, stories and other things. A large space with round tables." (Corner+tabl)</i>	Q.101

The most commonly used strategy revolves around routines, projects, play, etc. (89%) which establishes work patterns such as the ones illustrated in the examples (Table 4) below:

Table 4: Examples of Methodological Strategies Used in the Classrooms of Children

Categories	Examples	Identific
Methodology	<i>"Through routines: class time, explaining topics, exercises, games in corners, breakfast, break, explaining other worksheets, psychomotor skills, etc."</i>	Q.33
	<i>"Following a routine based on play. Class time/ worksheets/ breakfast/games/music."</i>	Q.73
	<i>"Class time – working independently – breakfast – break – class time – working independently. Wherever possible, this is the routine we followed."</i>	Q.40
	<i>"They were organised in different corners. Every day, the children would choose which one they wanted to work/play in. They're not allowed to choose the same corner every day."</i>	Q.48
	<i>"The first hour is class time, then working in corners, good hygiene, breakfast, class time, working in corners and home time."</i>	Q.80

Once the most important aspects about the way of teaching and classroom physical distribution has been the study of ***What the role of ICT is*** may start. The first thing looked into was whether they had computers in the classrooms or not, and then how they used them. Regarding this criteria, 53% answered that their classroom had a computer, whereas 45.2% said it did not. This means that out of 122 students who said they had a computer in their pre-primary classroom, 57 of them had one.

The answers to the question ***What are they used for?*** were, listed by importance, as follows: for watching films or videos (images, photos, etc.) on the topic they had been working on, for playing, for learning to operate the mouse or the keyboard, for reinforcing content, as another work corner, and finally – or solely – for the use of the teachers. Examples of these uses (Table 5) are given below:

Table 5: Examples of How to Use Computer in Infant Classrooms

Categories	Examples	Identific
Computer use		
Video/Films	<i>"It's only used for showing stories in the units, or for films or listening to music. For the last two, the cinema and the radio were also used."</i>	Q.26
Play/Game	<i>"There was a pattern where they sat down to use the computer L, M, X, J, and V. The teacher would choose the pupils and they would use the computer as a reward."</i>	Q.97
Operating the computer and its accessories	<i>"They use it for working on an activity. The children operate the mouse and familiarise themselves with it, and they write their name using the keyboard and see it come up on the screen."</i>	Q.32
General concepts	<i>"The computer is used so that the children can see things connected with the topic they've been working on, but the children don't operate the computer; the teacher does that."</i>	Q.20
Activity corner	<i>"It's used in one of the corners (the library corner) where the pupils work with software on basic subjects designed for nurseries."</i>	Q.39
For the teacher's own use:	<i>"The computer is only used by the teacher, but I never saw her using it. Someone who did use it was a person the teacher brought into the class who played songs for dancing, cartoon series, etc."</i>	Q.83

For the section **Experience of ICT in the Childhood classroom**, perhaps the answer which gives a general image of what tends to happen with technology in classrooms at this level is: *"I haven't seen ICT used in the infant classroom"*. The answer to this question was split almost 50:50. 47% responded that they had not seen ICT in the preschool, while 49.1% responded that they had. Some of the most relevant examples (Table 6) are detailed below:

Table 6: Example of Experiences during the Practicum with ICT in the Classroom

Categories	Examples	Identific
No See	<i>"I really haven't seen an ICT or computer room in a nursery classroom, and if the school where I did my teaching practice knows anything about computers, it's because once a week the teacher shows them images of things they haven't seen, or because they use videoconferences."</i>	Q.88
See		
Use	<i>"I've seen ICT in the classroom but it was not used correctly. They mostly used it to watch films. They rarely used the computer for working."</i>	Q.93
Resource	<i>"... my tutor wanted to use new technologies but the school would not provide the resources she needed. She brought her own computer to class, but it was too old and didn't work."</i>	Q.59
Negative Perception	<i>I have a negative impression, because I believe that using computers every day in class would have a very negative influence on teaching."</i>	Q.55
	<i>"On the one hand I think this is a good thing, because I don't agree with such young children using computers. However, on the other hand I think it's a bad thing because in the world we live in, where computers are part of daily life, it's a step backwards to prevent a child from using computers."</i>	Q.46

As it can be seen from the data and from the impressions given by the future teachers, they do not get some experience in ICT real use from their teaching practice at school since almost half of them saw nothing related to it during their practice period. It could be said that the majority of their comments are critical about the use of ICT and the lack of resources; they even have a negative attitude towards using computers at the infant stage.

In the face of these sometimes negative or reticent impressions about the use of ICT in the classroom, it will be useful to take a look at their responses to the statement: *"I do not consider it a relevant part of my teaching practice"*. In this case, 67% of the sample considered it to be an important aspect of their training, as shown in the following extracts (Table 7) from the responses:

Table 7: Examples of why Consider Relevant or Practical Training in ICT

Relevant to their training		
YES	<i>"I consider it very important because future generations are immersed (as I myself am) in a society where new technology forms part of a child's daily life."</i>	Q.82
NO	<i>"I do not consider a computer to be an important element in a child's education. It may be something they could use as an aid."</i>	Q.88

Finally, to find out a little about the experience they had had, they were given another set of questions. To the first of these: ***Do you feel competent enough to utilize ICT in the classroom?*** 60.4% (f=139) said they were. To the question ***Have you seen any use(s) of ICT in the classroom?*** 64.3% (f=148) replied "no" and 59.6% (f=137) answered "no" to the question: ***Have you seen any use(s) of ICT outside the classroom?***

Questions were asked those who had answered yes to any of these questions to give more details about what they had observed or carried out. Their responses could be set in three main categories i) those who had used the computer in classroom ii) those who had only been able to observe how computers were used in the classroom and iii) those who wished to give their comments despite having had no experience of it. The examples (Table 8) below give us an idea of these responses:

Table 8: Examples what they have done with ICT in Classroom Practices

Categories	Examples	Identific
Use	<i>"I produced the activity myself with my laptop and the program JClic. I put together a unit for my teaching practice using JClic, connected with the unit we were working on in class." During my work in secondary education, I took part in the last EDUCARED e-conference via the website (www.plasticarboleda.es)".</i>	Q.101
Design	<i>"In the Faculty, I designed a program with JClic based on the four seasons of the year (for 5 year-olds) and I used it in class to reinforce the things they had been learning."</i>	Q.100
Observation	<i>"I observed pupils playing with interactive CD-ROMs where they worked with activities adapted to their age-group"</i>	Q.93
No experience of it	<i>"During last year's teaching practice (primary) computers were used as it's an ICT-oriented school. They were used particularly in reinforcing and revising things the children had already learned. This year I have not used computers in class, and we did not actually have a computer in the class."</i>	Q.85

Since the most used methodology in classrooms was "the corners", and given that this was one of the aims of the study, they were asked: ***Do you know what a computer corner is?*** Their responses were as follows: 59.6% said they did, 36.5% said they didn't and 3.9% did not answer the question.

From these responses, those who had answered yes were asked to give more details about what they knew about it. The idea was to obtain information about how they arranged their syllabus, class distributions, time and space management, which software they used, etc. The examples (Table 9) below show some of these responses:

Table 9: Examples of which are done in the "Computer Corner"

Categories	Examples	Identific
Training within the Faculty	<i>"I have had no experience of it, but for some work I did within the Faculty we made a teaching unit for nursery where we designed different corners, and one of these was a computer corner for which we produced activities for learning numbers, differentiating colours, etc. The children were divided into groups of five and the computer had a microphone and headphones for children who had difficulty seeing or writing."</i>	Q.13
Curriculum Planning		
No planing	<i>"This corner was used by a group of six pupils per day who used the corner in turn. There was no type of planning for the corner and the pupils played on their own with CD-ROMs produced by the SM Group."</i>	Q.34
Free time (time not activities)	<i>"The computer corner only had one computer for the use of three pupils at a time. The computer was used when they had finished an activity. The computer was at a table with three chairs."</i>	Q.17
Giving information	<i>"The children do not use the computer; they only watch the screen when they are being taught something."</i>	Q.40
Play	<i>"There was no syllabus. The computers were only used at corner time and there was one for every two pupils. The resources used were games."</i>	Q.18
Distribution child-space-time	<i>"The computer corner is the space reserved for activities connected with learning about technology for nursery age children. They use resources such as educational computer programs in this corner to give children a start with computers."</i>	Q.131
Software	<i>"At playtime children choose corners, and one of these is the computer corner. There is one computer per child, and the games are educational, such as "My First Words", etc."</i>	Q.60
	<i>"The computer corner is the space reserved for activities connected with learning about technology for nursery age children. In this corner, they use resources such as educational computer programs to give the children a start with computers."</i>	Q.113
	<i>"They put a CD-ROM on for them and they play games against each other."</i>	Q.25

The idea which emerges from all these comments about the "computer corner" are that, firstly, there does not appear to be any clear planning for it within the curriculum. The corner has more use in play than in learning, and even if learning is implicit in the games, it is not properly incorporated into aims or content at curricular level. All the children in the classroom use it, and the most widely-used system of organisation is that groups take turns depending on the number of computers (pupil-computer ratio) and the amount of time dedicated to classroom corners.

The software used is more varied but they focus largely on generic interactive games from publishers, or JClic activities created by others or by students themselves. They use the MS Office package for creating presentations or other types of material, and use applications like Paint, YouTube for watching videos and educational market software such as "Reader Rabbit" ("El Conejo lector") Pipo, the internet, etc.

5. Conclusions

As it has been seen throughout the study, one of the major constraints for ICT training in the period of practice are the available equipment of classrooms. Half of the classrooms where they did their teaching practice had no computers, so these students had no "real" experience of using technology in pre-primary classrooms. Where there were computers, they were mostly used for playing, watching films and for reinforcing learning content.

The responses to the questionnaire provide evidence of working in corners in infant classrooms, a methodological decision consistent with the management of time and space associated with this strategy. Therefore the implementation of ICT has to be incorporated in this teaching process so that it becomes one of the routines (class time-classwork; working independently-psycho-motor skills; corner time-class time).

In terms of an interest in finding out about “the computer corner” and how it is used to incorporate ICT into classrooms, it has been seen that less than half the students have no knowledge of this corner. Their knowledge of it comes mostly from having studied it at university and not through having seen it in the classrooms where they did their teaching practice. Most of them said that it was used during “free time”, in “play” and/or for the teacher to “explain something” to the children. The pupils tend to take turns in this corner, and the programs (software) they use tend to be generic CD-ROMs produced by publishers as a teaching aid.

The ultimate finding is that the students would very much like to learn how to use computers in the pre-primary classroom itself, but the fact is that they have no knowledge of how to make use of ICT in classrooms by the end of this component in their training due to the fact that they have seen a little use of them in practice.

Previous study findings have been taken into consideration, among others, those carried out by Spaulding (2007), Kumpulainen (2007), Koster, Kuiper et Volman, (2012), adding the study on technology training for student teachers and its influence upon the use of technology in the classroom conducted by Spiegel (2002). In the light of these results, Spiegel proposes questions for future research, such as finding a way to reduce the gap between what can be done with technology in the classroom and what ought to be done. He also suggests looking for ways to provide adequate training for both future and more experienced teachers, together with the time to prepare lessons in which the use of technology turns out to be effective.

Also Ihmeideh (2011) highlights that although student teachers acknowledge the role of ICT in kindergarten children’s development; most of them do not use ICT in their teaching practices. Findings revealed that inadequate equipments were found to be the main reason for not using ICT. Moreover, student teachers mentioned that the cooperative teachers do not pay attention to computer center in the classrooms nor they encourage them to use ICT in their actual practices.

6. Implications

Teaching practice at school is critical to consolidate the theoretical base of teacher training, as well as for teaching practical experience acquisition. It is a time when everything that students learn is put into practice, but if it does not fulfill the aims of teaching practice it may be considered as a failure. The schools which are selected, on the one hand, and the teaching staff on the other, are the focal point on which this training is founded. If they do not offer the experience required by a future teacher, some of the selection criteria for participating schools need to be revised. Indeed, they should be chosen in a carefully considered and responsible way. It is a question of fulfilling the objectives set out for teaching practice. This study has revealed, amongst other things, a lack of provision for ICT in the classrooms selected for teaching practice. As there was no computer in half of them, it can be assumed that half the students were unable to have any experience of incorporating ICT.

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